

Notice of Allowability

Application No.

10/824,333

Examiner

Kevin P. Kerns

Applicant(s)

JACOBSON, THEODORE L.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/30/06, 2/22/06, & 8/14/06 interview with proposed amended and new claims.
2. ☒ The allowed claim(s) is/are 35-54.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 081606.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview (and subsequent facsimile transmission of proposed amended and new claims) with David Slone on August 14, 2006.

The application has been amended as follows:

In the claims:

Cancel claims 27-34.

Add the following new claims 35-54:

--35. (New) A fabrication method comprising:

providing a plurality of solid bodies;

surrounding the plurality of solid bodies with a volume of carrier liquid, the volume of carrier liquid being sufficient to coat the bodies and fill interstices between the bodies;

removing at least some of the carrier liquid that occupies the interstices so that the bodies become substantially close-packed solid bodies having a coating of the

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carrier liquid thereon, the coating being sufficiently thin that the bodies have interstices therebetween devoid of liquid, the coating being a state-changeable coating having an adhesive state and a non-adhesive state; and

causing the state-change coating to change from the non-adhesive state to the adhesive state so as to result in a solidified porous volume.

36. (New) The method of claim 35 wherein the solid bodies are hollow.

37. (New) The method of claim 35 wherein the bodies are of substantially the same density throughout their respective volumes.

38. (New) The method of claim 35 wherein:

the carrier liquid includes a solvent and an adhesive material, the solvent being sufficient such that the adhesive material does not exhibit its adhesive property; and

causing the state-change coating to change from the non-adhesive state to the adhesive state includes removing a sufficient amount of solvent so that adhesive material left on the surface of the solid bodies defines the state-change coating and exhibits its adhesive property.

39. (New) The method of claim 35 wherein:

the carrier liquid is a material above its melting temperature; and

causing the state-change coating to change from the non-adhesive state to the adhesive state includes lowering the temperature of the material below its melting temperature.

40. (New) The method of claim 39 wherein the material is a eutectic alloy.

41. (New) The method of claim 39 wherein the material is a paraffin.

42. (New) A fabrication method comprising:

providing a plurality of substantially close-packed solid bodies, the bodies having a state-changeable non-metallic coating, the state-changeable coating having an adhesive state and a non-adhesive state, the state-changeable coating being sufficiently thin that the substantially closed-packed bodies have interstices therebetween; and

causing the state-change coating to change from the non-adhesive state to the adhesive state so as to result in a solidified porous volume.

43. (New) The method of claim 42 wherein the solid bodies are hollow.

44. (New) The method of claim 42 wherein the bodies are of substantially the same density throughout their respective volumes.

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45. (New) The method of claim 42 wherein said providing the bodies comprises:

surrounding the plurality of solid bodies with a volume of carrier liquid, the volume of carrier liquid being sufficient to coat the bodies and fill the interstices between the bodies; and

removing at least some of the carrier liquid that occupies the interstices to leave the coating with interstices devoid of liquid.

46. (New) The method of claim 45 wherein:

the carrier liquid includes a solvent and an adhesive material, the solvent being sufficient such that the adhesive material does not exhibit its adhesive property; and

causing the state-change coating to change from the non-adhesive state to the adhesive state includes removing a sufficient amount of solvent so that adhesive material left on the surface of the solid bodies defines the state-change coating and exhibits its adhesive property.

47. (New) The method of claim 46 wherein:

the carrier liquid is a material above its melting temperature; and

causing the state-change coating to change from the non-adhesive state to the adhesive state includes lowering the temperature of the material below its melting temperature.

48. (New) The method of claim 47 wherein the material is a paraffin.

49. (New) A fabrication method comprising:

providing a plurality of substantially close-packed solid bodies, the bodies having a state-changeable non-metallic coating, the state-changeable coating having an adhesive state and a non-adhesive state, the state-changeable coating being sufficiently thin that the substantially closed-packed bodies have interstices therebetween;

causing the state-change coating to change from the non-adhesive state to the adhesive state so as to result in a solidified porous volume; and

thereafter, causing at least a portion of the state-change coating to change from the adhesive state to the non-adhesive state so as to allow at least a portion of the solid bodies to provide a volume in a formable state.

50. (New) The method of claim 49 wherein the solid bodies are hollow.

51. (New) The method of claim 49 wherein the bodies are of substantially the same density throughout their respective volumes.

52. (New) The method of claim 49 wherein said providing the bodies comprises:

surrounding the plurality of solid bodies with a volume of carrier liquid, the volume of carrier liquid being sufficient to coat the bodies and fill the interstices between the bodies; and

removing at least some of the carrier liquid that occupies the interstices to leave the coating with interstices devoid of liquid.

53. (New) The method of claim 52 wherein:

the carrier liquid includes a solvent and an adhesive material, the solvent being sufficient such that the adhesive material does not exhibit its adhesive property; and

causing the state-change coating to change from the non-adhesive state to the adhesive state includes removing a sufficient amount of solvent so that adhesive material left on the surface of the solid bodies defines the state-change coating and exhibits its adhesive property.

54. (New) The method of claim 53 wherein:

the carrier liquid is a material above its melting temperature; and

causing the state-change coating to change from the non-adhesive state to the adhesive state includes lowering the temperature of the material below its melting temperature.--

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: the prior art (Elbert – US 4,013,461) fails to teach or suggest the following process steps set forth in the applicant's claims: 1) removing at least some of the carrier liquid from interstices of

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the close-packed solid bodies (independent claim 35); 2) providing a plurality of close-packed solid bodies having a state-changeable non-metallic coating (independent claim 42); and 3) causing at least a portion of the state-changeable coating to change from the adhesive state to the non-adhesive state to provide a formable state to a volume of the solid bodies (independent claim 49).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Terminal Disclaimer

The terminal disclaimers filed on January 30, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration dates of US Patent Nos. 6,398,992 and 6,780,352 have been reviewed and are accepted. The terminal disclaimers have been recorded.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 4,013,461 (Elbert) is also cited in PTO-892.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin P. Kerns *Kevin Kerns 8/16/06*
Primary Examiner
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August 16, 2006